



Comm Co Capabilities Brief to Division Chief of Staff

25 August 2004



Mission



- To install, operate, and maintain the communications and information systems network infrastructure for the Marine Division Headquarters in order to provide a command and control capability for ground combat operations

MISSION STATEMENT FOR T/O 1883J

27 DEC 2001

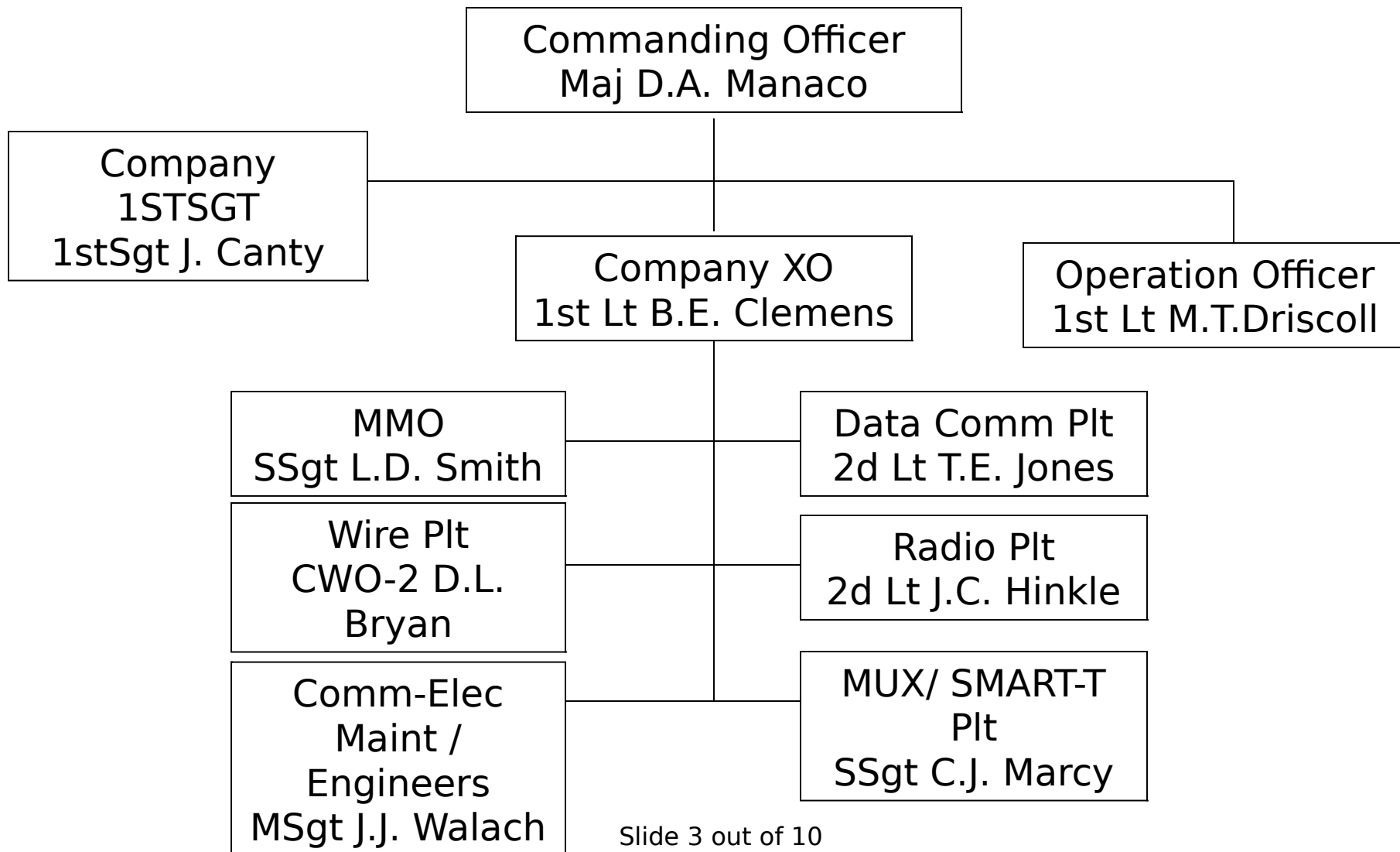
COMMUNICATIONS CO

HEADQUARTERS BN

PREPARED: 04/02/12



Communication Co Organization





Communication Co Equipment



<u>Equipment</u>	<u>T/E</u>	<u>O/H</u>
TT-42 0 <u>T/L</u>	2	2
SMART-T Terminals 2	6	6
DIGITAL TECH CONTROL Facility 0	1	1
AN/MRC-142 4	16	12
AN/MRC-138 6	16	10
AN/MRC-145 14	24	10
TDN GATEWAY 0	1	1
DDS SERVERS SB-3865 3	8 6	4 3
PSC-5	16	3
		13



Single Channel Radio



- VIASAT
 - HF, VHF, or SATCOM
 - PCMCIA Card: Insert card into side of computer
 - "Chat" capability
 - limited file sending, low data rate
- PRC-150
 - HF Primary, limited VHF capability
 - Replacement to PRC-104
 - ALE (Automatic Link Establishment): picks the best frequency for that particular time of day
- PRC-117
 - HF, VHF, UHF SATCOM
 - DAMA or Dedicated Channel
 - Comm Co does not normally rate radio; purchased by G-6 to plus up deficiency from gear provided to units in Iraq.
 - Looks similar to PRC-150; made by Harris Corp.
- PSC-5
 - DAMA or Dedicated Channel
 - Also has ground to air capability
 - Used in Iraq to communicate to higher, adjacent, and lower units



Data



- Windows 2003
 - Replaces Windows NT 4.0
 - Active Directory structure
 - Much of Comm Co's backbone needs to be upgraded: switches, routers, fiber
 - Recommended on (5) servers, currently using the (3) available per network
- Data Distribution System (DDS)
 - Provides SIPR/NIPR capability
 - 5 box system
 - Too slow for current network requirements
- Tactical Data Network (TDN) Gateway
 - Mounted to HMMWV
 - Too slow for current network requirements
- Deployed Security Interdiction Device (DSID)
 - Used anytime Division has a STEP entry; owned by 8th Comm Bn
 - Intrusion Detection
 - Tactical Firewall



DTC



- Digital Tech Control (DTC) Facility
 - Includes Techcon (see last slide)
 - Redcom Switch
 - Compact Digital Switch (CDS)
 - Multiplexers: (1) Promina 800 and (4) FCC-100
- Redcom Switch
 - Commercial voice switchboard
 - Ties into civilian switches as well as base telephone infrastructure
- Compact Digital Switch
 - DTC's tactical switch
 - Interfaces with "legacy" switches: TTC-42, SB-3865
- TTC-42
 - Used as primary switch by RCTs in Iraq



SMART-T/MUX



- Secure Mobile Anti-jam Reliable Tactical Terminal (SMART-T)
 - Provides SIPR, NIPR, and voice
 - Uses MILSTAR satellite system
 - Extremely High Frequency (EHF)
 - Used by battalions and RCTs in Iraq
 - Set up time: (2) Marines 30 minutes
- MRC-142
 - Provides SIPR, NIPR, and voice
 - Critical line of sight
 - Not SATCOM; but rather two antennas pointing at each other
 - Used as a backup to SMART-T links in Iraq



LMST



- Lightweight Multiband Satellite Terminal (LMST)
 - Provides SIPR, NIPR, and voice capability
 - Super High Frequency (SHF): C, Ku, Ka, and X bands
 - Higher data rate than SMART-T
 - Comm Co does not rate this. Provided by 8th Comm Bn
 - Construction time per terminal: 4 hours
 - Loads on two HMMWVs



SYSCON/TECHON



- Systems Control (SYSCON)
 - Reports status of entire network
 - Directs the installation and restoration of network according to priorities set by G-6
 - Staffed by Comm Co Officer or SNCO
- Technical Control (TECHON)
 - Directed by SYSCON to troubleshoot or accomplish any task
 - Coordinates with other units' TECHON
 - The technical “experts” on communication equipment
 - Located with DTC